

Commercial and Industrial Meeting Two: Implementation Topics

Tuesday February 17th, 2015

1:00 PM – 5:00 PM

Saltonstall Building, Second Floor, Rooms C & D

100 Cambridge Street, Boston

Draft Meeting Summary

Twenty-nine people attended this workshop (see attachment #1). The background material and the presentations can be found at <http://ma-eeac.org/ci-workshop-2-originally-scheduled-for-21215-to-be-rescheduled-stay-tuned-for-new-date-and-location/>.

INTRODUCTION, CONTEXT SUMMARY, AND WORKSHOP OVERVIEW

Dan Burgess, Acting Commissioner at the Massachusetts Department of Energy Resources (MA DOER), offered some opening remarks. Mr. Burgess welcomed participants to the meeting and expressed appreciation for the time they had devoted to the work of the EEAC and for their flexibility in dealing with the recent snow. He also congratulated the Program Administrators (PAs) on achieving their energy savings targets for 2014 in both gas and electric.

Following Mr. Burgess's remarks, Dr. Jonathan Raab, facilitator from Raab Associates, reviewed the meeting agenda. He began by listing the four implementation related topics to be covered during the meeting: small business, behavioral programs, commercial real estate, and the hockey stick pattern. He noted that the approach to each topic would include a brief presentation of the topic, time for clarifying questions, a discussion of the material, and councilor recommendations/next steps. Dr. Raab then outlined the ground rules for the meeting.

SMALL BUSINESS

Presentation

David Gibbons from National Grid reviewed the small business program, providing background on the program and laying out potential energy efficiency advancement opportunities for the Commonwealth.

Clarifying Questions

The group provided the following clarifying questions and comments about the small business program. *Responses are in italics.*

- What does it mean that vendors have “exclusive rights” to work with customers?
 - *Vendors are selected through a competitive RFP process. The PAs send out a scope of work and receive multiple proposals. Then there's a substantial vetting*

process. Vendors have discrete geographic areas by town in order to prevent them from running into each other and to minimize customer confusion.

- If a customer is approached by a vendor but declines to participate, what is their typical reasoning?
 - *There are two typical reasons. First is cash flow sensitivity, which is often very important for small businesses (although sometimes this can be overcome through financing). Second is business interruption. When a building is a revenue-generating environment, there are concerns any time you interrupt business operations. For certain businesses, like CVS for example, it is critical not to impact their revenue per square foot.*
 - *Reasons may vary by circumstance. Sometimes it's the cost, sometimes it's the timing, and sometimes they just don't like the vendor. When a customer says "no," we may send in another vendor to look at the situation with fresh eyes.*
- What is the "close rate" when a vendor approaches a small business? When a need is identified how often does the business agree to participate?
 - *For small commercial customers who receive an audit, and for whom one or more opportunities are identified, the close rate is about 78%.*
- There are households with over 100,000 kWh?
 - *The number was 10,000 kWh. The average household in New England is 7,000 kWh annually.*
- Do all PAs offer on-bill repayment?
 - *On-bill repayment is system-dependent. At National Grid we can put the charges right on the bill. Northeast Utilities (Eversource) uses a sundry bill process. No gas PAs offer on-bill repayment.*
- Are there differences in how different PAs manage the small business program?
 - *All the PAs use small business vendors. We have different numbers of vendors but it's the same kind of model. We don't want people tripping over each other. A streamlined approach helps a lot. We also want to make sure customers are making good decisions and not being sold "firewater."*
- Roughly what percentage of small C&I customers are in leased spaces? Are you dealing with owners or renters? Is this less of a barrier in small commercial than in residential?
 - *We deal both with owners and with renters. How often this arises depends on the territory. The closer you are to the city, the more likely the customer is a renter.*
 - *I think it is less of a barrier in small commercial than in residential.*
- Electricians may not have a direct financial interest in recommending natural gas opportunities. They understand lighting, and that is where the financial opportunity is for them, so why would they look at other issues?
 - *The vendors have a long-term relationship interest with their customers, so they have an incentive to subcontract out the non-electric work.*
 - *Eversource has internal goals for its vendors, including comprehensiveness goals. The vendors get paid when they implement the job--including the identification of thermal savings. The vendors have been trained on identifying thermal savings,*

and if they do not achieve their thermal incentives they may be terminated. This has happened in the past.

- *National Grid is currently testing augmenting their vendor programs with a gas-specific vendor following the primary electric vendor's visit; this model is identical to the model used to deliver specialized refrigeration efficiency services.*

Discussion

Dr. Raab presented the following three questions for discussion on the small business topic:

- What implementation strategies, end-use technologies, or services may be offered to complement the effectiveness of this program enabling greater reach?
- What are the potential benefits and program impacts of defining the various strata of small business eligible customers? Would segmenting small business customers this way lead to increased participation, greater gas/electric integration and coordination, etc.?
- What are the new approaches the PAs are considering and do they meet these goals discussed in this workshop?

The Councilors and PAs made the following comments and asked the following additional questions about the small business program, organized by sub-topic. *PA responses are in italics:*

General comments

- Small business customers represent about 20% of the utilities' production every year.
- The "turnkey" approach was started twenty years ago. It has been very successful and has been adopted in other parts of the country. If they tweak the approach, the PAs want to make sure it will work.
- The program has expanded from including only customers at 100 kW or less to including those at 300 kW or less.

Natural gas and other non-lighting opportunities

- A number of gas PAs are augmenting natural gas vendors, with an understanding that the expertise and capacity of electric vendors will differ substantially from those of gas vendors.
- PAs have been training vendors on conducting thermal audits, both in terms of identifying opportunities and in terms of presenting the opportunities in a language that resonates with customers.
- In augmenting natural gas vendors, the PAs have been looking by load to see which customers are large or medium-sized gas users.
- The PAs have been urging small commercial vendors to partner with natural gas experts who offer temperature controls or combustion controls.

Segmenting small business customers

- Customers on the top end of the small business program act more like medium-sized customers, while those under 100 kW act more like “micro-small” customers. The true small commercial customers are in the middle from 100-200 kW.
- PAs need to look at whether there is more we can do with the larger and smaller customers within this program to be more effective. PAs need to better understand these customers’ needs.
- There are also customers under 300 kW who are not small commercial on the thermal side at all, and who have substantial natural gas usage.
- With the “micro-small” customers, PAs have had some success with its Main Streets program, but there are challenges to overcome. These customers are very sensitive to business interruption.
- Municipalities typically are too large to qualify as small business customers, because you look at the sum of all their uses across their various properties. They are usually very large customers who receive a lot of “hand-holding,” just not through the small business program.

Marketing and expanding the participant base:

- About 2.2% of small businesses participate in the program every year. Is this a large enough percentage?
 - *There is a huge universe of small business customers, so 2.2% of this – or 4,000-5,000 – is actually a large number.*
- Energy represents maybe 1-2% of a small business’s costs, so it is likely not a pressing concern for many of them.
- The PAs do a lot of their own marketing to customers, including through webinars.
- The PAs also help vendors with marketing materials. They may help the vendors develop, print, or mail a more specifically targeted campaign, including through co-branding.
- The PAs also engage in “affinity marketing” by targeting membership groups, for example the Massachusetts Restaurants Association or the Hospitality Association.

New approaches under consideration:

- An incremental change to the small business program might involve having natural gas vendors go in to visit customers.
- The PAs might consider carving off the micro customers who have 100 kW or less. This is a huge universe of more than 100,000 customers for National Grid alone. They serve these customers with something similar to the Home Energy Services (HES) or Main Streets model, or maybe another technology layer such as small CHP. Whatever the PAs do, however, they do not want to undo the successes of the current program.
- In the Street Sweeps and Main Streets approaches, PAs pre-announce that they are coming and a contractor is available to do the installations right away. They do a number of audits in one day and implementation occurs weeks later. Vendors also load up trucks with the things they can install immediately.

- Ten to twelve communities participated in Main Streets in the past year, among all the PAs.
- In the HES approach, the audit is separate from the implementation to increase comprehensiveness; this brings more vendors into the market. This model is more scalable, which could help the PAs reach the smaller electric customers.
- Typically the more targeted you get the higher the costs, so if the EEAC embraces a more targeted approach there would be a need to consider implementation and costs.
- If the EEAC embraces a more targeted approach, there would also be a need to consider how the HES model would work with larger accounts.
- Building analytics and benchmarking might help the PAs target and prioritize the larger customers within the small business program and ensure that these customers are being served by more specialized vendors, including those with thermal expertise.
- For the smaller customers within the small business program, the PAs have considered developing a self-diagnosis tool and a menu of simple offerings that they could select and that would be shipped to their door. The PAs have already used this approach with residential customers.

A “broad” approach versus a “deep” approach

- The PAs want to go both “broad” and “deep” with customers, reaching a large number of them and also doing a comprehensive job once they are there.
- The intent of the program has always been to touch each customer once, and be as comprehensive as possible. That model has faced some challenges but been successful overall. The PAs want to touch a customer, satisfy them, and then move on.

Recommendations

The Councilors provided the following recommendations and next steps for the small business program:

- Priority #1 – Deeper Savings, Priority #2 – Increase participation
- Expand prescriptive menu of services to better advance natural gas energy efficiency opportunities and non-lighting electric measures.
 - Increase participation in the program and deeper savings
 - Use building analytics and benchmarking to target small business customers
- Investigate potential for various program implementation approaches to serving the various strata of small business eligible customers.
 - Increase outreach and awareness programs for greater participation.
 - Work with trade groups and associations.
 - More comprehensive (e.g. integrate gas/electric) marketing programs for small business.
- Determine which implementation strategies, technologies and building diagnostic capabilities are transferable and effective for serving Small Business customers.
 - Explore HES-type approach and segmentation by size and type.

All voting Councilors supported the recommendations. The PAs largely agreed with the recommendations. There was some discussion about adding a recommendation to seek the most energy savings per dollar and use existing data to identify and target the most important sectors, but participants suggested that this is always an underlying priority for the PAs and is embedded in the structure of their work, and that PAs have an obligation to serve all their customers.

BEHAVIORAL AND ENGAGEMENT PROGRAMS

Presentation

George Lawrence, EEAC Consultant, provided background on behavioral and engagement programs in Massachusetts and opportunities for advancement in energy efficiency.

Clarifying Questions

Councilors provided the following clarifying questions and comments about the behavioral and engagement programs. *Responses are in italics.*

- How do the PAs' accounting (and remuneration) models encourage them to engage in behavioral and engagement programs?
 - *The behavioral programs are a complement to the PAs' other programs. They may include training elements, equipment purchases, and incentives that decrease over a series of years.*
 - *There are quantifiable savings from these programs, based on measures assigned to particular implementation strategies. We will provide incentives to customers who provide quantifiable energy savings resulting from behavior changes that are persistent and sustainable.*
 - *Behavior programs are not just conservation programs. They are process improvements. For example, CEI (continuous energy improvement) and SEM (strategic energy management) programs involve looking at energy density and making the processes more efficient. These programs are no different from LEAN and other industrial manufacturing improvement programs. There are measures in place to avoid double counting of the energy savings. A study done by Opinion Dynamics provides helpful background.*
- Is there a need to incentivize customers as part of these programs given that they get the benefit of reduced costs?
 - *There are a number of different models out there. One model from Newfoundland involved a combination SEM and energy management information system package. They'd say, if you sign an MOU agreeing to do all projects with a certain return on investment, we will provide you with the support you need, including infrastructure and sub-metering systems. Then you will agree to do these projects with no incentive. Another model is used in the Pacific Northwest in which they provide a 2 cents per kWh incentive for the savings that*

come out of the program. And they provide support in terms of creating the mathematical model and doing the regression analysis with the key performance indicators. They look at the energy users in the plant and the parameters needed to understand how energy is being used in the production process.

- Why would we want to do more of this?
 - *It's another way to engage the biggest manufacturers in the state to go deeper, drive more capital projects, and claim savings beyond the classic project based savings that are happening now.*

Discussion

Dr. Raab presented the following three questions for discussion on the behavioral and engagement programs:

- Should a distinction be drawn between programs that only seek to change customer behavior and programs that combine behavior and longer term energy efficiency engagement (SEM/CEI)?
- Are C&I behavioral and/or SEM/CEI programs cost-effective and a good fit for Massachusetts? If not, under what circumstances can they become cost-effective?
- What are the implementation barriers for behavioral and SEM/CEI programs? Are there certain types of customers that would be better suited to these programs?

The Councilors gave the following comments about behavioral and engagement programs, roughly organized by sub-topic. *Responses are in italics:*

Challenges and benefits of behavioral and engagement programs

- The persistence of behavioral and engagement programs can be short, and you need to continue to pursue them in order to get the benefits.
- Due to persistence issues, one should not do a “cumulative” count when quantifying the energy savings from these programs based on prior efforts.
- These programs really work, and can allow you to save significant amounts of energy continuously. For example, the Opower program saves about as much annual energy as the HES weatherization program. Opower is persistent and inexpensive.
- A lot of businesses have behavioral programs for their employees, which have a positive spillover when people go home and engage in the same behaviors.
- One implementation barrier may be the metric for paying the utility companies. It's not clear why the utilities would do something they don't get paid for, especially when it's undercutting their market. We need to find a way to promote these programs so there's an incentive for the utilities to get paid.

Energy managers

- Focusing on energy managers and the continuous improvement of processes makes a lot of sense. The PAs should think about incentivizing energy managers, project management support, and building operator certification. They should consider

improving building operator training, and consider including project manager and energy manager support as part of these programs.

- Energy managers help in ensuring persistence.
- Energy managers may be most appropriate for the larger C&I customers. It would not make sense to use them for the smaller ones. An energy manager rider or for a business alliance group might make sense for mid-size C&I customers.
- One possible problem with subsidizing energy managers is you never know what they're doing when you're not there. The goals should be to empower the company but not give them too much. If they don't do it, it's their loss.

Additional approaches

- It may make sense to work with franchises and chains.
 - *Typically franchises have a dedicated energy manager who is responsible for implementing strategies for the franchises.*
- For the PAs' largest accounts including universities, the customer will engage in an MOU. They commit to multi-year agreement and resources are made available to do the programs. These have worked well.
- There is an international energy management standard called ISO 50001. Companies that become ISO 50001 certified can take the next step to participate in the DOE Superior Energy Performance program, and earn silver, gold, or platinum certification. One next step might be to look and see if anyone is considering or already ISO 50001 certified.
- We could develop a CEO forum to learn from peers on the energy front, modeled on Associated Industries of Massachusetts' CEO connection. They meet quarterly and talk about any issue that's in their business. The meetings tend to revolve around human resources and insurance issues. We could use a similar model around behavioral training.

Recommendations

The Councilors provided the following recommendations and next steps for behavioral and engagement programming:

- Investigate successful behavioral programs to determine the critical elements for success and their cost-effectiveness.
- Research SEM/CEI programs to determine their applicability, cost effectiveness, and the effort required to implement in Massachusetts.
- Evaluate the potential savings from behavioral and/or SEM/CEI programs.
- Incentivize building operators and owners, and provide building operator training around behavior issues (develop in consultation with Building Owners and Managers Association (BOMA) and others); and support peer-to-peer cohorts.
- Develop guidelines for how energy savings can be tracked from behavioral programs, and how PAs can get credit for behavioral savings.

- Explore leveraging behavioral and SEM/CEI programs for dispatchable load control, particularly in retail sector.
- Provide technical assistance to identify opportunities and implement.
- At minimum, do a pilot during the next 3 years for large C/I customers

All voting Councilors supported the recommendations, and the PAs largely agreed with the recommendations. One participant noted that there may be regulatory barriers to some of these programs, and that a pilot could be helpful for educating regulators. Some participants suggested that these programs had moved beyond the pilot stage. Participants agreed that, regardless, some concrete action should be pursued.

COMMERCIAL REAL ESTATE

Presentation

Alex Pollard, MA DOER, provided general background on commercial real estate and highlighting emerging opportunities for improving energy efficiency.

Clarifying Questions

Councilors provided the following clarifying questions and comments about commercial real estate. *Responses are in italics.*

- How much of a factor is a green building designation in landlord's ability charge higher rent?
 - *We have not studied this but, anecdotally, owners will tell you that a LEED-certified building can command higher rents.*
 - *It may be the case that they can charge higher rents to tenants who are already willing to pay higher rents for high-end buildings. It's a "chicken and egg" issue.*
- Where is there the most energy use for this sector – lighting, plug load, or HVAC?
 - *It depends. For higher efficiency buildings with efficient HVACs, it's plug load. It also depends on the usage. At hospitals it's the HVAC. But for a typical office building it's lighting.*
- For the customers who made energy efficient investments, why did they do it? Was it just to save money, or for other reasons like comfort, or young employees' desire to work in an energy efficient building?
 - *Non-energy factors like health for the workers or proper light levels are substantial reasons. But for most part we're selling on the energy efficiency benefits.*
- Would we be better off if we played up the non-efficiency-related benefits?
 - *It's a package. We want to detail all the benefits and cost impacts, including both the energy and the non-energy impacts.*

Discussion

Dr. Raab presented the following questions for discussion on the commercial real estate programs:

- What are the most effective existing PA outreach strategies and programs to reach owners, managers and tenants in the CRE sector?
- What would be the most effective supplemental strategies and programs to reach owners, managers, and tenants in the CRE sector?
- Is there a role for dashboards, building labeling, or software screening tools to identify buildings with high usage so they can be targeted for increased attention?

Participants offered the following questions and comments about commercial real estate. *Responses to Councilors' questions are in italics:*

- The PAs learned a lot from the MOU experience. The turnover rate with tenants is substantial, and with a new tenant there is a slim window for action. For this reason the PAs came up with the streamlined lighting approach that was deployed in Q3 2014, called Sustainable Office Design.
- Another issue to consider is that the programs are for the account holder who is responsible for implementation and persistence of the measure. This may be a barrier when there are a lot of small commercial customers in a single building. The PAs try to work with both the tenants and the owners.
- The tenant fit out represents an important opportunity to intervene. The tenant will be taking on a new lease, the owner contributes some amount per square foot, and the tenant may get a loan to upgrade the property even further.
- For larger tenant fit outs, tenants will engage with architects and engineers on the design. With this in mind, is there any potential intersection between the commercial real estate realm and the new construction program?
 - *PAs are building awareness within the design community of the offerings in new construction and major renovations. We are promoting these opportunities to lighting designers and firms — we tell them that when their commercial and institutional customers come to them, this is something they can respond to them with.*
 - *There are certain types of measures that will have a longer cycle, like a boiler. When you're doing a tenant fit out unless you're doing the entire building you're usually just looking at a single floor.*
- How do you decide who to approach, the owner, the tenant, or someone else?
 - *It depends. With the commercial real estate working group, we found that it's hard to talk to brokers because they're looking for a deal — they want someone moved in.*
 - *The tight time frame around tenant fit outs is a big issue. The key is making sure designers are aware of these programs. A lot of it comes down to education, and people understanding programs and opportunities that are out there. If tenants understand they can get \$1 per square foot and instruct their designer to make these changes, then maybe it happens.*

- When do the most important interactions typically occur? During the tenant change over?
 - *It depends. The PAs do a bunch of little stuff hoping they will be effective. We try to leverage all our partners, from design communities to engineering firms. We have dedicated account executives who work with these customers. We try to reach out to building owners to make sure they understand a program is in place and how it can benefit their tenants and their building marketability. We also try to educate tenants themselves. It's sort of a "shotgun" approach.*
- With respect to account managers, how is the system organized. For example, do you have a single manager that has all CB Richard Ellis Group's accounts?
 - *Yes, that is how it works. We also have a program manager who works with that account executive.*

Recommendations

The Councilors provided the following recommendations and next steps for commercial real estate:

- Implement recommendations from CRE Working Group Roadmap, Massachusetts Commercial Real Estate Survey Analysis and Office Market profile report and other supplemental strategies.
 - Add 7 opportunities (below) plus anything additional from Roadmap when completed.
 - 1. Offer pre-packaged suites of energy efficiency options to increase energy efficiency upgrades in buildings (lighting, HVAC and other measures).
 - 2. Increase engagement with tenants. Energy tracking and dashboards are useful to both owners and tenants. CRE actors want to know how they compare to other buildings.
 - 3. Perform outreach to building managers and owners. Work with the owners to incorporate EE into retrofits or tenant fit-out.
 - 4. Target marketing to CRE businesses based on building vintage. The CRE study found that the majority of energy consumption occurs in building built before 1990.
 - 5. Energy efficiency leases are a longer-term market-transformation opportunity.
 - 6. Leverage the role of account managers. The study showed that of the CRE businesses considering energy efficiency investments, a large proportion had PA account managers.
 - 7. Speak to real-estate professionals in their own language.
- Expand Sustainable Office Design program features, including streamlined reviews and incentives, to technologies beyond lighting.
- Explore market transformation opportunities:
 - Advanced building operator training
 - Sub-metering and wireless
 - Better financing opportunities

- Mid-size office building targeted program—whole building approach.
- Use BERDO data for identifying CRE opportunities in Boston and leveraging participation in EE programs.
- Explore main drivers for CRE EE investment opportunities.

All voting Councilors supported the recommendations, and the PAs largely agreed with the recommendations. There was some discussion on whether the 7 opportunities in fact represented a “shotgun” approach and whether they were focused enough on the likely drivers of success. One of the PAs noted that the 7 opportunities are not just a scattershot of ideas, and are focused instead on addressing a set of defined barriers. Another participant noted that a “shotgun” approach isn’t a bad thing when different landlords and tenants respond to different approaches, and if the savings are very good when you get a “hit.”

THE HOCKEY STICK PATTERN

Presentation

Jennifer Chiodo, Cx Associates, provided a background presentation on the hockey stick pattern and listed opportunities for advancing energy efficiency savings.

Clarifying Questions and Discussion

Councilors provided the following clarifying questions and comments about the hockey stick pattern. *Responses are in italics.*

- Do PAs think the hockey stick pattern is a problem?
 - *It is not a problem the way it’s often categorized. It’s not uncertain. It’s reliably predictable. We have visibility into it through the management of our project pipelines. In terms of capacity planning and resource planning, it does create stresses on people, but you staff for that. You can factor it into your resource planning.*
 - *We have looked at the upstream data, and the fourth quarter is bigger for upstream transactions as well. People are buying more of their lighting etc. in the fourth quarter. This suggests that the commercial market is acting akin to what we see with the hockey stick pattern.*
 - *The bottom line is if we could have our savings be the same for all twelve months that would be great, but it is manageable as is.*
 - *A couple of years ago at National Grid we tried adding early year bonus incentives to encourage savings earlier in the year, but it didn’t work. People do the savings on their own time scale. We would have had to double the incentives to make it work.*
 - *A few years ago, in response to brownouts, we did a special program that increased incentives for savings in the middle of the year. All that happened is we saw two hockey sticks, one for the January to June timeframe and another for July to December.*

- *We're often just working with our customer's schedules.*
- We see the same pattern in June with the government.
- Investing too much into changing the hockey stick pattern may be dangerous because we don't want to disturb business planning.
- Are there some measures that result in a hockey stick more than others?
 - *Larger, more complicated measures, such as Combined Heat and Power (CHP) or larger chillers, tend to contribute the most to the hockey stick pattern. You may have a CHP project closed in October but the benefits won't get counted until December due to the process of verifying savings, metering, and having outside third parties review it.*
 - *We try to claim every project that's completed by the end of the year. If there's a project with uncertainty regarding its completion, it gets pushed into the following year. The PAs don't care much about which year it gets counted under.*
- Is this an issue everywhere in the country?
 - Yes.

Discussion

Dr. Raab presented the following questions for discussion on the hockey stick pattern:

- Is the Hockey Stick pattern a problem? Would a more even flow of projects result in improvements in total savings in any given year or over the course of a three-year plan?
- What approaches have been tried, how effective have they been, and are there other potential options that should be tried?

Councilors offered the following questions and comments about the hockey stick pattern, organized by sub-topic. *Responses are in italics.*

Encouraging earlier, mid-year savings:

- The PAs should not be encouraged to use mid-year financial incentives to combat the hockey stick. If you add incentives it just increases costs for getting the same energy savings.
- It could be counterproductive to try to fix the hockey stick; we could lose big C&I accounts.
- If we put resources towards combatting the hockey stick we're taking away resources from other important issues, like improving savings in the midsized C&I market.
- It does not make sense to try to buck the human nature to procrastinate.
- Education could help. This could involve more outreach efforts aimed at raising awareness. We should help customers understand what is available.
- Internal sales incentives – analogous to tying the bonus of sales staff to quarterly performance – might also help.

Ensuring incentives are not increased to bank end-of-year savings:

- There are anecdotes of incentives being offered to complete projects within a certain year in order to bank the savings for that year and meet yearly targets. This should not be happening.
 - *PAs do not offer higher incentives overall at the end of the year. For large projects, most of the project development happens in the first three quarters and the projects are completed in the fourth quarter. We have found that the incentives paid out per kWh in fourth quarter has been less than the incentives paid out per kWh in other quarters.*
- It may make sense to agree on standardized ways to negotiate these incentives.

Improved reporting

- PAs could provide assurances to the council in quarterly reports, and include the probability that projects will achieve completed and the expected energy savings.
 - *The PAs did two forecasts during 2014, at the time of Q2 and Q3 report. They cannot do a Q1 forecast because the data is not available. There are also monthly actual projections in the data dashboard, which is like a growth chart.*
- Continuing those kinds of assurances would be great.

Recommendations

The Councilors provided the following recommendations and next steps for the hockey stick pattern:

- Acknowledge existence and challenges of hockey stick, but don't spend inordinate resources to address
- Improve pipeline forecasting and reporting to improve visibility and predictability
- Avoid offering incentives that create inequities or unintended consequences (e.g., waiting to the end of year or not moving forward)

All voting Councilors supported the recommendations, and the PAs did not raise any objections. A number of Councilors noted that their goal was not to shackle the PAs and prevent them from designing customized incentives. Instead, they were simply suggesting that PAs should not tie incentives to artificial timing issues.

NEXT STEPS/WRAP UP

Dr. Raab thanked the group for its input and discussed next steps. He reminded participants that the third C & I workshop is scheduled for March 3 from 9am-1pm, listed the topics that had been proposed for the discussion, and requested feedback on the proposed topics. A participant asked how these topics had been arrived at, noted that some important topics were not on the list, and suggested that there should be a process for deciding the topics. Dr. Raab noted that the first two topics – demand reduction and oil customers and other regulatory barriers – had been in the top ten of the polling that had been conducted.

In response to councilors' suggestions, the list of topics was revised to include the following:

- Demand Reduction and Gas Constraints
 - Geo-targeting as a potential solution
- Oil/Propane Customers
- Whole Building and Deeper Savings Programs
 - Commercial Zero Net Energy Buildings (ZNEB)
 - Lower cost whole building audits
- Add Segmentation (Size/Sector)
- C&I Reporting
 - Program Reporting vs. Initiative

Dr. Raab noted that they would be distributing an agenda, briefing packet, and list of discussion questions for the March 3 meeting within the next few days. He requested that the councilors review the materials and let him know of any suggested improvements. Dr. Raab then thanked group members for their participation and concluded the meeting.

ACTION ITEMS

The following action items were captured during the meeting:

PAs, DOER, EEAC Consultants, and Raab Associates

Finalize briefing materials for the third C & I meeting.

EEAC Councilors

Review draft meeting summary for the second C&I workshop and provide corrections

Review the finalized background materials for the third C&I workshop and come prepared to respond to the discussion questions

Raab Associates (with CBI)

Prepare the meeting summary for this workshop.

Prepare the agenda for the third workshop

**Attachment A
Attendance**

EEAC C&I Implementation Workshop, February 17, 2015, 1-5 pm Saltonstall Building, 100 Cambridge St. 2nd Fl. Rooms C&D, Boston		
Last Name	First Name	Company/Organization
Baston	Douglas	NAEA
Berkman	Tobias	CBI
Boecke	Donald	Attorney General's Office
Breslow	Marc	Climate XChange
Buchler	Derek	FirstFuel Software
Burgess	Dan	MA DOER
Chiodo	Jennifer	Cx Associates
Gibbons	Eugenia	Mass Energy Consumers Alliance
Gibbons	David	National Grid
Gromer	Paul	Peregrine Energy Group
Hanover	Jodi	Rich May, P.C.
Johnson	Paul	Greentek
Kulkarni	Amit	National Grid
Lawrence	George	EEAC Consultant DOER
Lawrence	Spencer	MA DOER
Lipke	Paul	Health Care Without Harm
Malmstrom	Rick	DFCI
McCarey	Maggie	MA DOER
McCarthy	Ezra	National Grid
Medeiros	Nelson	Eversource
Miller	Meredith	Cape Light Compact
Patton	Marlana	Peregrine Energy Group
Pollard	Alex	MA DOER
Powelka	Aimee	MA DOER
Raab	Jonathan	Raab Associates
Rio	Robert	AIM
Seidman	Nancy	MassDEP
Winkler	Eric	ISO-NE
Wright	Kathryn	Meister Consultants Group